

Land Capability Classification

The land capability classification system is used to show, in a general way, the suitability of soils for cropland. It is a three-category interpretative system. The two highest categories, class and subclass, give broad perspective of the suitability of map units for certain crops or pasture. These categories indicate the degree and kinds of limitations for these uses. The system evaluates soils for mechanized farming systems that produce the more common cultivated field crops, such as corn, small grains, cotton, hay, and field grown vegetables.

Capability Class

The highest category of the system is the capability class. The capability classes are groups of soils that have the same general suitability for the broad kinds of use common on farms and ranches. There are eight classes designated by Roman numerals I through VIII.

Classes I, II, III, and IV are suitable for mechanized production of common field crops if properly managed, and for production of pasture and woodland. The degree of limitation for production of cultivated crops increases progressively for class I to class IV. Limitations may affect production as well as the risk of permanent soil deterioration, as by erosion.

Classes V, VI, and VII are generally not suited to mechanized production of common field crops without special management, but are suitable for permanent cover such as grasses and trees. The severity of the soil limitations for crops increases from class V to class VII. Areas in class VIII are generally not suitable for crops, pasture, or wood products without management that is impractical. Class VIII areas may have potential for other uses, such as recreation or wildlife habitat.

Capability Subclass

The subclass identifies the dominant kind of limitation in the class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, IIe. The letter e shows that the main limitation is risk of erosion unless a close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

There are no subclasses in class I because the soils of this class have few limitations. The soils in class V are subject to little or no erosion, but they have other limitations that restrict their use mainly to pasture, woodland, wildlife habitat, or recreation. Class V contains only the subclasses indicated by w, s, or c.

Capability Unit

The lowest category of the capability system is the capability unit. Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Units are designated by Arabic numerals, for example IIe-2. This category is not used in all soil surveys.

Crop Yield Estimates

The average yields per acre that can be expected of the principal crops under a high level of management are presented in the following table. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, or green manure crops; and harvesting that insures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change. Absence of a yield indicates that the soil is not suited to the crop or the crop is generally not grown on the soil.

Land Capability and Yields per Acre of Crops

Aroostook County, Maine, Southern Part

Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.

Map Symbol and Soil Name	Land Capability	Corn Silage	Irish Potatoes	Oats
		Tons	Cwt	Bu
CgA: Caribou	1	---	360.00	90.00
CgB: Caribou	2e	---	360.00	90.00
CgC: Caribou	3e	---	300.00	90.00
CgD: Caribou	4e	---	200.00	80.00
CgE: Caribou	7e	---	---	---
CnA: Colton	2s	14.00	260.00	---
CnB: Colton	2s	12.00	---	---
CnC: Colton	4e	---	---	---
CnD: Colton	6e	---	---	---
CnE: Colton	7e	---	---	---
CoA: Conant	2w	---	350.00	85.00
CoB: Conant	2w	---	260.00	85.00

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Land Capability and Yields per Acre of Crops - Continued

Aroostook County, Maine, Southern Part

Map Symbol and Soil Name	Land Capability	Corn Silage	Irish Potatoes	Oats
		Tons	Cwt	Bu
CoC: Conant	3e	---	250.00	85.00
DaA: Daigle	3w	18.00	230.00	80.00
DaB: Daigle	3w	18.00	230.00	80.00
DaC: Daigle	3e	14.00	230.00	70.00
GP: Pits	8s	---	---	---
Ha: Hadley	1	---	345.00	---
HoA: Howland	2w	18.00	---	80.00
HoB: Howland	2w	18.00	---	80.00
HoC: Howland	3e	14.00	---	70.00
HvB: Howland	6s	---	---	---
HvC: Howland	6s	---	---	---
LnB: Linneus	2e	---	400.00	90.00
LnC: Linneus	3e	---	350.00	85.00

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Land Capability and Yields per Acre of Crops - Continued

Aroostook County, Maine, Southern Part

Map Symbol and Soil Name	Land Capability	Corn Silage	Irish Potatoes	Oats
		Tons	Cwt	Bu
LnD: Linneus	4e	---	---	---
MaA: Machias	2w	20.00	260.00	75.00
MaB: Machias	2w	20.00	260.00	75.00
MaC: Machias	3e	14.00	230.00	65.00
Md: Made Land	---	---	---	---
MhB: Mapleton	2e	18.00	295.00	80.00
MhC: Mapleton	3e	16.00	275.00	80.00
MhD: Mapleton	4e	---	---	---
MmC: Mapleton	6s	---	---	---
MmD: Mapleton	7s	---	---	---
Mn: Mixed Alluvial Land Pd Mixed Alluvial Land Vpd	4w 6w	---	---	---
MoA: Monarda Burnham	4w 5w	---	---	---

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Land Capability and Yields per Acre of Crops - Continued

Aroostook County, Maine, Southern Part

Map Symbol and Soil Name	Land Capability	Corn Silage	Irish Potatoes	Oats
		Tons	Cwt	Bu
MoB: Monarda Burnham	4w 5w	---	---	---
MrB: Monarda Burnham	7s 7s	---	---	---
Pa: Muck Peat	7w 8w	---	---	---
PeA: Perham	2w	20.00	330.00	80.00
PeB: Perham	2e	20.00	330.00	80.00
PeC: Perham	3e	18.00	300.00	70.00
PeD: Perham	4e	---	---	60.00
PgB: Plaisted	2e	18.00	330.00	75.00
PgC: Plaisted	3e	16.00	270.00	70.00
PgD: Plaisted	4e	---	---	60.00
PrB: Plaisted	6s	---	---	---
PrC: Plaisted	6s	---	---	---

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Land Capability and Yields per Acre of Crops - Continued

Aroostook County, Maine, Southern Part

Map Symbol and Soil Name	Land Capability	Corn Silage	Irish Potatoes	Oats
		Tons	Cwt	Bu
PrD: Plaisted	6s	---	---	---
PrE: Plaisted	7s	---	---	---
PvB: Plaisted Howland	6s 6s	---	---	---
PvC: Plaisted Howland	6s 6s	---	---	---
RaA: Red Hook Atherton	3w 4w	20.00	---	60.00
RaB: Red Hook Atherton	3w 4w	20.00	---	60.00
SgA: Stetson	2s	16.00	270.00	80.00
SgB: Stetson	2s	16.00	270.00	80.00
ThB: Thorndike	2s	16.00	270.00	---
ThC: Thorndike	3e	14.00	240.00	---
ThD: Thorndike	4e	---	---	---
ThE: Thorndike	6e	---	---	---

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Land Capability and Yields per Acre of Crops - Continued

Aroostook County, Maine, Southern Part

Map Symbol and Soil Name	Land Capability	Corn Silage	Irish Potatoes	Oats
		Tons	Cwt	Bu
TkB: Thorndike	6s	---	---	---
TkC: Thorndike	6s	---	---	---
TkD: Thorndike	6s	---	---	---
TkE: Thorndike	7s	---	---	---
TsB: Thorndike	6s	---	---	---
Howland	6s			
TsC: Thorndike	6s	---	---	---
Howland	6s			
Wn: Winooski	2w	25.00	310.00	---

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